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| APPLICATION NO.   | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---|-----------------|----------------------|------------------------|------------------|
| 09/975,430  | 10/10/2001      | Yuping He            | AB-141U                | 9078             |
| 23845   | 7590 03/11/2004 | EXAMINER             |                        |                  |
| ADVANCED BIONICS CORPORATION<br>12740 SAN FERNANDO ROAD |                 |                      | MACHUGA, JOSEPH S      |                  |
| SYLMAR, CA 91342  |                 |                      | ART UNIT               | PAPER NUMBER     |
|   |                 |                      | 3762                   | - B              |
|   |                 |                      | DATE MAILED: 03/11/200 | 4                |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u> </u>  |  |  |  |  |
|---|--|--|--|--|
|   | Application No.  | Applicant(s)   |  |  |
| Office Action Comments  | 09/975,430   | HE ET AL.  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |
| The MAILING DATE of this communication app  | Joseph S. Machuga  | 3762   |  |  |
| Period for Reply  | चवाड जा सांच ८०४मा डाम्बर सारा सांच र  | orrespondence address  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |
| Status  |  |  |  |  |
| 1) Responsive to communication(s) filed on  |  |  |  |  |
|   | action is non-final.   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |
|   | A parte quayre, 1000 G.B. 11, 40   | 0.0.210.   |  |  |
| Disposition of Claims   |  |  |  |  |
| <ul> <li>4)  Claim(s) 1-20 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) 10-14 is/are allowed.</li> <li>6)  Claim(s) 1,2,6-9 and 15-20 is/are rejected.</li> <li>7)  Claim(s) 3-5 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/o</li> </ul>   | wn from consideration.   |  |  |  |
| Application Papers  |  |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine  | epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).   |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list  | s have been received.<br>s have been received in Applicat<br>rity documents have been receiv<br>u (PCT Rule 17.2(a)).  | ion No<br>ed in this National Stage  |  |  |
| Attachment(s)  1) ☒ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.  | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:  |  |  |  |

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## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 6-9 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weijand et al #6125300 in view of Nebrigic #6304467.
- 3. Weijand et al discloses an implantable pacemaker having a generator (41) with a voltage regulator (43) controlled by register (44.) Not disclosed by this reference are the specifics of the regulator.
- 4. Nebrigic discloses a charge pump power converter for small portable electronic devices. The device includes two capacitors (Cf and Cl) that divide the voltages between the input and output. The arrangement disclosed maintains a controlled output even with variations in the input.
- 5. Given this teaching it would have been obvious to one of ordinary skill in the art to use Nebrigic's power converter in place of voltage regulator (43) in Weijand et al's device to provide a stable output voltage for the pacemaker. To make capacitor Cf

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variable to provide adjustable output voltages would have given Weijand et al teaching of varying the output and also because it old and well known in the art to adjust the output voltage of a pacemaker based on the position of the electrodes within the heart, based on the specific patient or based on the desired treatment or duty cycle (pacing, defibrillating, etc). Finally to arrange the load capacitor (CI) as a bank of capacitors arranged in parallel and series would have been obvious given Weijand et al's teaching of this (Note Fig 3a) through capacitor banks (C1-C5.)

- 6. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weijand et al #6125300 in view of Nebrigic #6304467 as applied to claim 1,2, 6-9 and 15-17 above, and further in view of Wold #6094597.
- 7. Wold discloses a medical implant having an energy source that includes a voltage input, an inductor and a path to ground. To use this type of power source in place of energy source 12 in Nebrigic's device of the proposed combination would have been obvious given that it's an old and well-known system with old and well-known attributes.
- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 9. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. Claims 10-14 are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Machuga whose telephone number is 703-305-6184. The examiner can normally be reached on Monday-Friday; 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D Sykes can be reached on 703-308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph S. Machuga

Examiner Art Unit 3762

> ANGELA D. SYKES SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700

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